DOCUMENT RESUME

ED 143 160 EC 101 408

AUTHOR Willoughby, Doris, Ed.; And Others
TITLE Your School Includes a Blind Student.
INSTITUTION National Federation of the Blind, Chatsworth, Calif. Teachers Div.
PUB DATE [74]
NOTE 38p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Blind; Early Childhood Education; Elementary Secondary Education; *Normalization (Handicapped); Placement; *Regular Class Placement; *Teacher Role; Visually Handicapped

ABSTRACT

Intended for regular classroom teachers, the guide offers suggestions for aiding the integration of blind students into the regular educational system. An introductory section addresses such basic considerations as providing appropriate services and contacting community resources. The bulk of the document provides suggestions on 33 specific topics, including art, books and other written materials, discipline, home economics, lunch, music, note-taking, physical education, reading devices, seating in the classroom, mobility, and vocational guidance. Supplementary suggestions for the preschool and primary grade students are included. (CL)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED143160

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

YOUR SCHOOL INCLUDES A BLIND STUDENT

BY

DORIS WILLOUGHBY, *Editor*
SHIRLEY LANSING
MARY BARBER
PATRICIA MAURER

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Robert Acosta
President

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS."

Published by

NATIONAL FEDERATION OF THE BLIND TEACHERS DIVISION
ROBERT ACOSTA, PRESIDENT
9927 DE SOTO AVENUE, APT. 26
CHATSWORTH, CALIFORNIA 91311

EC 101 402

CONTENTS

I. INTRODUCTION 1

DEFINITION OF "BLIND STUDENT" 1

PURPOSES OF THIS BOOKLET 1

PROVIDING APPROPRIATE ARRANGEMENTS 2

DETERMINING THE AMOUNT OF HELP NEEDED 3

PROVIDING SPECIFIC HELP IF NEEDED 3

SCHEDULING RESOURCE HELP IF NEEDED 4

MATERIALS 5

SOURCES OF ADDITIONAL INFORMATION 7

II. SUGGESTIONS ON SPECIFIC TOPICS 8

ART 8

ASSIGNMENTS 8

BLINDNESS: GOOD CONCEPTS AND BAD 9

BOOKS AND OTHER WRITTEN MATERIALS 10

TRANSCRIBED TEXTBOOKS 10

READER SERVICE 12

RECREATIONAL READING 13

CHALKBOARD PRESENTATIONS—SEE "NOTE-TAKING"

CONVERSATION 13

DISCIPLINE 14

EXTRACURRICULAR AND OUT-OF-SCHOOL ACTIVITIES 14

GRADING 14

HOME ECONOMICS 15

INDUSTRIAL ARTS 15

LUNCH 16

MATERIALS 16

MAP WORK 16

MATHEMATICS 17

MECHANICAL AND TECHNICAL GRAPHICS 17

MOVIES, PLAYS, AND ASSEMBLIES 17

MUSIC 18

NOTE-TAKING 18

CONTENTS—*continued.*

ORGANIZATION OF POSSESSIONS 18
PHYSICAL EDUCATION 19
PICTURES, DIAGRAMS, AND DISPLAYS 20
PSYCHOLOGICAL TESTING 21
READER SERVICE—SEE "BOOKS"
READING DEVICES 22
SCHEDULING COURSES 22
SCIENCE 22
SEATING IN THE CLASSROOM 23
SOCIAL SKILLS 23
AWKWARD MOTIONS OR MANNERISMS 24
TESTS 25
TRAVEL (MOBILITY) 25
TYPING—SEE "ASSIGNMENTS"
VOCATIONAL GUIDANCE 26

III. SUPPLEMENTARY SUGGESTIONS FOR THE YOUNGER CHILD 27

PRESCHOOL 27
KINDERGARTEN AND THE PRIMARY GRADES 27

IV. CONCLUSION 32

FOOTNOTES 32

REFERENCES 32

YOUR SCHOOL INCLUDES A BLIND STUDENT

I. INTRODUCTION

A few hundred years ago, blind people were regarded as public curiosities–objects of ridicule. As the centuries went by, the blind came to be regarded with pity. Care and kindness replaced overt rejection. This, however, was not citizenship, but rather the status of dependent or ward.

One more great step remained in the history of the blind–genuine integration into society. That step is complete today for thousands of blind people who have entered full-time competitive employment and taken on all the tasks of useful citizenship in their communities.

Your school can be a part of this final step as you accept a young blind student who wishes to be more than an object of pity. The regular public or parochial school can do this in a particularly effective manner, since residential schools always face the problem of isolation from the world at large.

Merely enrolling the youngster and placing him in a seat, however, assures nothing. If he is led about by his classmates, protected by his teachers, and given high grades for the smallest accomplishments, he will be nothing more than an object of charity and pity after all.

The Teachers Division of the National Federation of the Blind offers this booklet as a guide for the genuine integration of the blind student into the regular educational system, as a preparation for normal, responsible adulthood.

Definition of "Blind Student"

For the student who is totally blind or has a small amount of vision, all parts of this booklet are applicable.

Many people who consider themselves "partially sighted," however, function more effectively in some situations by using alternative techniques (methods usable by the totally blind). Even if some of the ideas in this paper are not applicable for a particular student, other points may be very helpful. We urge you to help your partially sighted student avoid a common and very serious error: relying on sight in a situation where an alternative technique would be more efficient, effective, or safe.

Purposes of This Booklet

When the classroom teacher learns that a blind student will be enrolling, a typical reaction is to wonder how to manage without neglecting the other boys and girls. One

purpose of this paper is to assure the teacher that, with proper placement and arrangements, the blind student will *not* require a disproportionate amount of his time, and can be expected to be well-adjusted and independent. The teacher of today expects to work with individual differences, such as the gifted student who needs extra challenges or the ethnically mixed class that needs guidance in human relations. The blind student is another example of individual differences; and viewing him in this perspective is an important step toward good adjustment.

The blind youngster should follow the regular curriculum of his school, on a level with his individual ability. It is *not* expected that he should need to repeat grades, use easier books, or otherwise achieve less due to blindness *per se*.

The most serious problem of blindness is not the physical lack of sight, but public attitudes. Sighted people tend to do far too much for a blind person, who in turn tends to accept this and encourage a vicious circle. The best thing that we as educators can do for any blind student is to convince him that he can and should lead a full, normal, independent life.

The most important factors for the successful placement of a blind student in school probably are (1) the understanding that this is a *normal* boy or girl, who has the same needs as any other youngster, and who happens to be blind; (2) the expectation of success; and (3) flexibility and imagination.

A further purpose of this paper is to provide suggestions regarding just how the necessary arrangements (including the teaching of specific blind techniques by someone other than the busy classroom teacher) can be provided.

Providing Appropriate Arrangements

By the fourth grade, a student should have already learned Braille, cane travel, and personal skills such as dialing the telephone. Unlike the first grader who should have considerable time available daily from a teacher who knows Braille, the blind adolescent needs to spend a relatively small amount of time in learning and maintaining skills specific to blindness, and this should decrease as he moves through the secondary school years. Many metropolitan districts now provide itinerant teachers who work with each student as needed. The normal blind adolescent or preadolescent to whom such a service is not available, however, can still succeed in his neighborhood school if proper arrangements are made.

(Note.–A *newly blinded* student will need some specialized help at first, regardless of his age. See below for suggestions regarding how this may be provided.)

The older student who is well-grounded in skills will need very little help. He can explain how he has done his schoolwork in the past; his parents can help; and with a cooperative spirit on the part of the school faculty, arrangements can be worked out to everyone's satisfaction.

The Hadley School for the Blind (see "References") offers correspondence courses which may be helpful to a student with a particular need such as the study of Braille music notation or the abacus.

Below are listed several examples of resource people with specific knowledge of blind techniques. For the student in the elementary grades it is desirable to have such a person available regularly. As the normal blind student moves on in junior high and high school, however, he has less and less need for such help. If a resource person is available, he will help the older student by periodic consultation. If there is no resource person available with special knowledge, a good adjustment can be worked out in which problems are solved through ingenuity and cooperation, and through reference to materials such as this booklet.

It is often helpful to have one person (such as the counselor) take the responsibility for coordinating necessary arrangements and for doing research on any problems which may arise. It is essential, however, that *all* school staff regard the blind student as a part of their regular responsibility, and that the student himself assume responsibility appropriate to his age.

For preschool through the primary grades, or for a very immature older child, see also "Supplementary Suggestions for the Younger Child."

Determining the Amount of Help Needed

The school placement of a particular student, including the amount of individual help available, is a matter for careful consideration by all concerned. This booklet offers suggestions on how various amounts of help may be provided to a student, and may also be of value in deciding how much help is necessary. The advantages of living at home and attending the regular school are very great, and should be carefully weighed against the advantages of any special help available elsewhere.

Providing Specific Help If Needed

Many school districts (local, county, or joint intercounty) provide resource or itinerant personnel with special training in the education of blind students. If this is not the case in your area, however, competent assistance can often be provided in some other way. Ideas include:

1. A competent adult blind person in the community may volunteer his help as needed.

2. A counselor from the state rehabilitation agency for the blind may have time available.

3. Personnel from the state residential school for blind children sometimes help students in other schools–especially those who formerly attended the residential school.

4. A certified teacher of blind children who is not presently teaching may be willing to work part time or even on a volunteer basis, especially if a Braillist is available to help prepare materials.

5. The state department of public instruction may have a consultant for the education of blind children.

Following is an outline of areas with which the resource person typically will be most concerned. (With a competent older student, of course, he often will merely verify that the boy or girl no longer needs special help in a particular area. As mentioned previously, the competent older student can get along without resource help if he and the staff cooperate to work out appropriate arrangements.)

1. He will consult with school staff regarding methods for teacher and student. The successful resource person does not presume to tell the classroom teacher how to teach; rather, his help makes it possible for the classroom teacher to implement his own plans for the class which will include the blind student.

2. He will provide direct instruction or review in any skills or techniques which are important to the blind student but are not included in the general curriculum. Usually this would be Braille reading and writing (including the use of the slate and stylus), travel with the long white cane, use of the abacus, and personal skills for daily living. It will also include typing if that subject is not usually available to students in the particular grade involved.

3. He will order or provide transcribed books and other materials.

4. He will help the school staff, parents, and students (not only blind students) develop positive attitudes toward blindness.

5. If necessary he will "trouble-shoot" any unforeseen problems as they arise.

When the first blind student enters a given school, a resource person may take a strong lead in the above areas. Even at first, however, all responsibility must not fall on the resource person—if it does, then the student has not yet entered the regular program at all. As time passes, more and more responsibility should pass to the other staff and to the student.

Scheduling Resource Help If Needed

Arranging a convenient time for individual help may require thoughtful planning. Working during study hall, during a long noon hour, before or after school, or on weekends are obvious possibilities. At times it may be desirable for the resource person to work with the youngster individually during class time. If the student is having particular trouble with a given type of lesson, individual attention may help. Occasionally a lesson in alternative techniques may be substituted for the sighted student's equivalent—as, while the other fourth graders work on general penmanship, the blind student may work on typing or on his

personal signature. If no other schedule seems possible, the youngster may receive resource help on a staggered-time basis so that he misses part of a different class each time. Any plan for working individually during class time, however, should be used sparingly; if it is used a great deal, the student is not really integrated into his classroom at all. Neither is he really a part of his class if the resource teacher's room is considered the student's "home" classroom.

A summer program of intensive study in techniques may provide sources of instruction which are not available during the school year.

Correspondence courses, such as those offered by the Hadley School (See "References") may help to fill a particular need.

Sometimes a particular student will need more individual help than can be provided through the above methods because he has a poor background and needs much remedial help; because of problems apart from blindness; or because he is newly blinded or very young. Alternative suggestions for this kind of problem include:

1. Consider whether his difficulty is really due primarily to something apart from blindness. If so, proper help for this other problem is what is needed. In some cases (such as slow reading) a tutor or volunteer may be very helpful without needing any training in blind techniques. A change in school placement may be called for in problems such as mental retardation.

2. A regular itinerant teacher may be hired (part or full time) by the local school, the county or joint intercounty school district, or the state department of public instruction.

3. The younger student may attend the residential school for a time before transferring to his local school.

4. The student might commute to a special resource center in a nearby metropolitan area for a time before transferring to his local school.

5. The older student may take time off for training at an adult rehabilitation center and then return to school.

Materials

Other than books, very little in the way of specialized equipment and supplies is really essential for an individual blind student. A metropolitan area with a well-developed resource program will usually assemble a large supply of helpful materials, including arithmetic aids, games in Braille, et cetera. The minimum requirements for a single student, however, are few and may involve little or no cost to the school system.

Probably the minimum necessary special materials (other than books) will be only a Braille slate and stylus, Braille paper, a Perkins Brailler, a typewriter, an abacus, a Braille

watch, and a long white cane. Often the student will already possess all of these. In order to use recorded reading materials the student may need a talking book machine, tape recorder, and/or cassette machine; these can often be borrowed from the state library for the blind or from the state department of public instruction or department of rehabilitation.

Funds for materials may be available from the county or joint intercounty school district, the state department of public instruction, the state rehabilitation agency, and Federal sources such as Title VI. A quota allotment in the form of supplies from the American Printing House for the Blind is available for every legally blind student. Service organizations such as the Lions Clubs or the Delta Gamma sorority often will donate money for equipment. Sometimes aids may be borrowed from individuals or agencies.

Below are listed a few of the agencies which sell aids and appliances.

National Federation of the Blind
218 Randolph Hotel
Des Moines, Iowa 50309

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206

American Foundation for the Blind, Inc.
15 West 16th Street
New York, New York 10011

Royal National Institute for the Blind
224-6-8 Great Portland Street
London, W1N 6AA England

Materials can often be made at home or at school. For example, wooden geometrical models can easily be produced in any workshop. (See also "Pictures," below.)

Occasionally a student may resist using a particular method or aid which his teachers believe helpful. For example, he might take a dislike to his Braille watch and begin asking others for the time; or a student with useful vision might refuse to wear his glasses. If this kind of problem occurs, adults should carefully consider whether the aid really is important and helpful, and whether it is being used properly. If it is, some suggestions are as follows:

1. Demonstrate the value in ways that matter to the student. For example, a student who persists in "forgetting" his cane might be introduced to more interesting and difficult travel situations.

2. Ask a competent adult to discuss his own use of the aid. A blind businessman could point out how the cane makes possible his mobility and independence.

3. Encourage other students' interest in and acceptance of the aid. They might enjoy trying it out themselves.

In certain situations, other students should be urged *not* to help the youngster who gets into difficulty due to non-use of a particular technique.

4. Someone whom the youngster particularly admires might mention how helpful the aid can be.

5. Compromise at first by allowing him to use the aid or method only part of the time, and gradually increase use to full time.

6. Investigate whether some factor unknown to the teachers is interfering. Do his parents or friends mistakenly discourage use of the aid? Might his eye condition have changed so that new glasses are needed?

7. Calmly but firmly insist that he use the aid. If he persists in "losing" the item, provide an extra and keep track of it.

Sources of Additional Information

This paper contains much in the way of general suggestions, and some rather specific points. However, on specialized topics such as sewing, cooking, or industrial arts, there will be many questions unanswered by this paper. Several references which bear on specific topics are listed at the end of this paper and/or under the relevant headings. If your questions remain unanswered, you are encouraged to write to the National Federation of the Blind for further information. As an organization of blind people throughout the United States, the NFB can be helpful to you in locating any information related to blindness. The address is:

National Federation of the Blind
218 Randolph Hotel
Des Moines, Iowa 50309

The Braille Monitor is the monthly magazine of the National Federation of the Blind, and carries articles of current interest regarding blindness. It is published in Braille, talking book, and inkprint, and is available to all interested persons. (See "References.")

II. SUGGESTIONS ON SPECIFIC TOPICS

(Note.–This Alphabetical List contains several headings denoting specific school subjects, and also other headings of a more general nature. If your question is not covered under the name of the subject, it may be covered under other headings. For example, suggestions relevant to an English class are found under "Assignments," "Books," "Note-Taking," et cetera. See also "Supplementary Suggestions for the Younger Child.")

Art

The student with some useful sight will probably make maximum use of it in art. Even if his sight is not efficient for reading print, he may find that he can enjoy art visually by using a magnifier or bringing the paper quite close to his eyes.

Otherwise he will use a tactual approach to art. When the class works in a medium such as clay, no variation is necessary for the blind youngster. If other students are working in a visual medium such as pencil sketching, the blind youngster should be permitted to use a tactile medium. A little imagination can suggest many appropriate media–string art, collage, metal sculpture, macrame, soap carving, and so on.

See "Pictures" for suggestions regarding the study and appreciation of art works done by others.

Assignments

In almost every instance, there should be no alteration in the assignment for the blind student. He can do the same work as everyone else, and do it just as quickly.

Several alternatives are available for handling written assignments, each being appropriate for some circumstances.

Typing should be taught from approximately the fourth grade, and frequently the best choice is for the student to type the assignment. No alteration of the regular typewriter is necessary. The very young student may be allowed to cross out errors with x's; and soon he can learn to use correction paper or other material which allows errors to be blotted out and typed over.

Depending on the nature of the lesson, it may be practical for the student to hand in a recording of his composition. This would not, of course, be appropriate for an English theme where spelling and punctuation are to be evaluated; but it may be very appropriate for a science report. Cassette recorders, which are small and compact, are very convenient and are increasingly available.

If the student needs to reread his own composition, he will probably make his rough draft(s) in Braille or recorded form, and then type or record a final copy. Similarly, in a math exercise he may do his computation in Braille and then type just the answers to hand in.

Occasionally a modification will need to be made in assignments such as using a microscope. (See "Science.") Such modifications should be the exception rather than the rule, however; and when really necessary, the modification should provide a logical *equivalent* rather than a substitute which is easier and/or irrelevant.

Shortening an assignment, simplifying it, or allowing extra time should be done only as a temporary stopgap until a better idea can be found, or for a reason apart from blindness. The newly blinded eighth grader will probably need shortened assignments at first—but only at first. The student with low intelligence may need easier work, but this is not because he is blind. If a test or other in-class assignment is in compact form for the sighted but requires the handling of many materials for the blind student, it may be reasonable to allow him to work beyond the regular time limit; however, he should continually strive for greater efficiency so that later he may not need this consideration.

If, due to appropriate reasons such as the above, an assignment is altered, it is important that the alteration be specific, and that a definite minimum be required. Merely to say, "You don't have to do all of the problems," opens the way to laziness and may instill in the student the idea that he cannot perform as the others.

The normal blind student with adequate training in techniques should not need simplified or shortened assignments.

Blindness: Good Concepts and Bad

The blind student's self-image is extremely important. By avoiding or counteracting negative influences and by promoting positive influences, you can be of great help in building the image of the normal, competent blind person.

Some say that the blind must learn an attitude of dependence, since they must frequently depend on others. This is false for many reasons. There is always a way to achieve any important goal; and if sighted assistance is involved for some particular task, the blind person will expect to reciprocate appropriately rather than to accept help passively. Furthermore, in this day and age we are *all* interdependent; and the competent blind person is no more so than average.

In building positive concepts, it is important that the student and his classmates meet capable blind adults. Encourage your student to learn about the National Federation of the Blind and to take part when he is old enough. Help him regard the cane and other aids as alternative (not inferior) techniques, and as symbols of independence rather than objects of pity or annoyance. Expect that, although he may use different methods, he will achieve the same goals in life as his classmates.

Encourage him to talk with his class and other groups, formally or informally, about blindness. Of course, the shy boy or girl may do very little speaking before a group, and no student's time should be exploited; however, within the bounds of good sense this is one of

the best ways for the blind student to develop his own positive philosophy and communicate it to others.

Help your student to develop a realistic view of himself and his goals. On the one hand, he should not expect to do everything perfectly–after all, who does? On the other hand, avoid the error of regarding every accomplishment as "wonderful," even when it is something as routine as finding a doorway. (Note.–Of course, if a given student has been having trouble with a routine task, we will compliment him when he does achieve success. However, there is a vast difference between "Good! I knew you could do it!" and "What a *marvelous* job! I'm sure I could never do as well!")

Blindness must never be used as an excuse for poor performance. School staff will want to help the student avoid "taking advantage" in ways such as expecting too much help or special consideration, playing one adult against another, or assuming that all his problems are due to blindness.

Unfortunately, much of our literature and tradition stereotypes the blind as helpless and inferior. The social studies text may describe the blind as wards of the state, incapable of managing their own lives. Less obvious stereotypes are perhaps even more common–for instance, the idea that the blind are especially musical.

Concerned blind adults are working to counteract this problem, and we urge you to do the same. If a stereotype is encountered, we urge you to bring in some compensating remarks or literature. If, for example, someone remarks that the blind always have extra-good hearing, explain that it is a matter of development through practice, rather than innate compensation. If an incompetent blind person is encountered in person or in literature, find a way to convey the fact that his helplessness is due to individual factors (such as old age) rather than blindness as such.

Books and Other Written Materials

If a book is to be transcribed into Braille, recorded form, or large print, an inkprint copy should be sent to the transcriber as long as possible before the course begins. As the student matures, he should take more and more responsibility for this.

After the course begins, the student himself will need a print copy of all books and other materials. Even in the case of texts which have been transcribed, the student may occasionally prefer the use of the inkprint copy with a reader for certain purposes, such as interpreting diagrams.

Transcribed Textbooks.–When a book will be used regularly, it is desirable to have it available in Braille, large print, or recorded form. Sources vary from one area to another. Examples include the state department of public instruction, the state library for the blind, local volunteer transcribers, and national agencies such as those listed below. If library services in your state are poor, we encourage you to join with the National Federation of the Blind in an organized effort to improve them.

The decision as to what mode of reading is best for a particular book can be difficult. The older student will often have his own preference. Someone should always consider carefully just how the book will be used, and what methods are most efficient for each particular student. A complete volume could easily be written on this subject alone, but following are listed a few important points:

1. *Avoid guiding a student into using large print (or regular print) when it is really not efficient for him.* Due to the stereotype that techniques for the blind are necessarily inferior, this is one of the worst errors that commonly occurs. We urge you to ask, "Which mode is most efficient for this student?" rather than, "Can he possibly use print?" Certainly some people who are legally blind do use print with efficiency. However, hundreds of others have been required or encouraged to attempt to read print despite such unnecessary problems as fatigue, slow speed, frustration, and generally being placed at a disadvantage. If such students rely mainly on other modes of reading instead, they can compete on an equal basis and achieve according to their actual ability.

It is important that Braille be included. Many purposes are best served when the material is written down on paper—telephone numbers, spelling lists, recipes, direct quotations, math problems. Also, recorded forms are always limited by the speed of oral reading. (Even condensed-speech recordings have a limit.) With Braille, however, slowness is due only to lack of training, low expectations, and/or low ability rather than to the mode itself. With proper training and attitudes, the Braille reader can read at several hundred words a minute.

2. Consider the manner in which the book will be used. Often this influences the mode. For example, a recorded mode would not be suitable for a foreign language text where the student must learn to recognize the written form of each word, or for a math text from which problems are to be copied.

3. Consider the cost and availability of each mode. If a student can use any of several modes, mention acceptable alternatives on the order blank.

In some states it is possible to send all book orders to one agency, which will obtain books as needed. The state library for the blind and the department of public instruction or the department of rehabilitation should be able to tell you whether this is the case in your area.

Note also that more and more informational recordings are being produced for the general market; although these are not designed specifically for blind students, they are extremely suitable for them.

If you cannot obtain adequate textbook service within your state, it may be necessary to contact agencies elsewhere. Two examples appear below, but there are many others; write to the National Federation of the Blind for further suggestions if you have difficulty locating suitable sources for transcribed books.

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206

APH produces and sells books in Braille, large print, and recorded forms. It also maintains a catalog which lists textbooks available for loan or for sale by agencies throughout the country. (See "References.") Questions may be sent to Mr. Carl Lappin, Textbook Consultant.

Recording for the Blind
215 East 58th Street
New York, New York 1002

Taped textbooks can be borrowed for the school year from this agency.

It is extremely desirable to have the services of transcribers available locally, to produce necessary materials that cannot be bought or borrowed. The Jewish Temple Sisterhoods and the Delta Gamma sorority and local chapters of the American Red Cross are examples of organizations which are especially interested in this kind of work. The Library of Congress catalog *Volunteers Who Produce Books: Braille, Large Type, Tape* may help you find transcribers in your area. (See "References.")

Depending on the amount of material needed and the services already available in your area, you may wish to develop your own transcribing service—either by finding persons who are already trained, or by arranging for the training of new people. For a complete discussion of organizing such a group, see "Beginning a Transcribing Group," by Florence Grannis. (See "References.")

Reader Service.—In many situations it is not efficient to attempt to transcribe daily handouts. A reader should be available so that such material may be read aloud to the student. For occasional short items, no formal arrangement is usually needed; a congenial classmate reads the material aloud. For more extensive needs, a regular arrangement should be made.

Use of a reader is usually the most efficient means for doing research in which it is necessary to look through many different materials. A reader is also necessary, of course, when it is impossible to obtain a certain item in transcribed form.

It is desirable that readers be paid, since volunteers are generally less reliable than employees. The blind student himself should have as much voice as possible in hiring readers (and dismissing them if necessary), and in certifying their satisfactory performance. Too often the relationship of the reader to the blind student is a case of the "tail wagging the dog." Ideally the relationship is that of a reliable employee working at an adequate wage for a responsible employer.

As an employer, the blind student should make his requirements clear from the start. He expects the reader to read exactly what appears on the page (unless otherwise directed) at the speed and in the manner desired by the employer. With practice the reader should be able to describe graphs, illustrations, et cetera. Unless otherwise directed, he should read as quickly as he can speak, realizing that his purpose is altogether different from that of a dramatization.

For the very young student, of course, it may be necessary for an adult to direct how reading should be done. As the student matures, however, he should soon be able to take the responsibility himself.

Recreational Reading.—Recreational reading materials may be obtained from the state library for the blind and other sources described above.

Chalkboard Presentations

(See "Note-Taking.")

Conversation

Adult blind people make the following suggestions:

1. Use the word "blind" naturally, as you would a description of any other characteristic, without dwelling on it unduly. Also use the words "look" and "see" in the usual way, although the blind person may examine the item tactually.

2. Criticize or commend the blind student as you would anyone else. Avoid saying as though it were a compliment, "I really forget that you are blind, since you get along so well." Although such a comment is usually accepted in the spirit which was intended, this is really a veiled barb: it implies that blind people do not usually get along well. (Compare the comment, "You drive so well that I really forget you are a woman!") Also, the youngster knows he *is* blind; and if he should develop a great desire to have people forget it, he is likely to reject such valuable aids as the white cane.

3. By all means continue to use gestures and facial expressions as you normally do, but supplement them verbally as necessary so that the blind youngster is not excluded.

4. Introduce yourself until he knows your voice, and encourage his classmates to do so also. Speak to him by name so that he is sure when he is being addressed. Let him know when you are finished with a conversation, so that he is not left talking to the air.

He will also appreciate your greeting or introducing visitors and new students by name, so that he knows who is present.

5. Some sighted people shout at the blind as though they were deaf instead. Avoid this unnecessary indignity.

Discipline

The blind student should live up to the same standards of behavior and manners as anyone else. This cannot be emphasized too strongly. We do a youngster a tragic disservice if we do not insist that he follow the expected code of conduct. Blindness has no effect on emotional balance or self-control. If the usual penalty for vulgar language is to stand in the hall for five minutes, then this consequence is suitable for the blind student too. If a serious infraction customarily results in a telephone call to the parents, then the blind student should not expect exceptions.

In occasional instances, of course, there may be reason to permit a blind student to do something not ordinarily allowed, such as to converse quietly during a filmstrip for a description of visual material. If the reason for this is clear, however, and the permission well-defined, there should be no confusion between this and unrestrained chatter.

As any experienced teacher knows, students respect adults who insist that they behave responsibly. The blind boy or girl is no exception.

Extracurricular and Out-of-School Activities

If an activity is open to all students this should include the blind student. For activities which involve competition, he should not be automatically excluded, nor should he expect special consideration if he fails to qualify.

Suggestions given in this booklet regarding particular classes will be applicable to extracurricular activities with similar characteristics.

If a resource person is available, he will help with questions, and will also encourage the student and his parents to ask him for help or advice with out-of-school activities such as Scouting.

Grading

Grade the blind student according to his performance, applying the same standards that are used with the rest of his class. This point cannot be emphasized too strongly.

The student who is given "sympathy grades" and allowed to get by with substandard work will pay a tremendous price at some future time. As he grows older, his teachers or professors will be less and less likely to accept poor work; and certainly no employer will hire and keep an employee with inadequate skills.

The blind student who is having difficulty should be helped and graded in the same manner as any other student having difficulty. The blind student whose work is average or above should receive the grade which he deserves and no more.

With a *newly blinded* student, it may be desirable to use a non-competitive evaluation, such as satisfactory/unsatisfactory, for a few months.

Home Economics

Today blind homemakers cook, sew, keep house, and raise a family, and have no more difficulty than their sighted neighbors. The young blind student can develop his or her skills at the normal rate of progress.

In most situations no special equipment is necessary; all that is needed is to use the other senses well, as in reading the marks on a measuring cup by touch, or listening for when the carrots begin to boil. Many items of equipment designed for the sighted are especially appropriate for the blind as well—pie-cutting guides, metal measuring cups, and needle threaders, for example. Sometimes a slight alteration in equipment can be helpful, as in filing notches on a dial. Many aids have been made especially for the blind, and although many of these are helpful, the only one which often is essential is the coffee probe (a device which beeps when the cup is full). Even this is not necessary in informal situations, where the student may use his finger to see whether the cup is full.

Parents should be sure not to exclude a child from helping with cooking, dishwashing, and other family chores; a difficult time is in store for any student who enters a home economics course without having had any prior experience at home.

Space does not permit detailed discussion of techniques in this booklet. Specific suggestions are available in "The Blind Can Sew—Some How-To Ideas" and *Suggestions for the Blind Cook* (see "References").

Industrial Arts

Many blind people are successfully employed in occupations such as machinist, sheet metal work, electronics, plastics, auto mechanics, woodworking, and designing. Many others derive satisfaction from pursuing hobbies in these fields.

Participation in an industrial arts class is an especially good way to build confidence, since it so clearly repudiates the stereotypes of helplessness and incompetence.

No special safety guards are necessary, other than those which are needed for everyone. The blind worker is no more accident-prone than anyone else; and any apprehension which the instructor may feel will soon disappear as the blind student works right along with his or her classmates.

Many specialized tools and instruments have been developed for the blind; however, in most industrial arts classes the only one really necessary is a measuring instrument. Although Braille rulers do exist, a "Rotomatic" measuring device is preferred because of greater accuracy. The "Rotomatic" (available from the National Federation of the Blind) is

accurate to 1/64 inch. Extension rods can be made and added to it to enable measurement of larger items.

By using proper techniques, the blind student can produce a complete product (including the finishing) as independently as his or her classmates. The resourceful industrial arts teacher will think of many ways in which other senses may be used as alternatives to sight--for example, making a mark by scratching with a sharp instrument instead of with a pencil. Space does not permit a detailed discussion of techniques here; however, the National Federation of the Blind will provide additional suggestions and references on request.

Lunch

As soon as the student is familiar with the lunchroom arrangement, he will need little if any assistance. After he learns where the silverware, trays, and other equipment are located, he can stand in line with the others and help himself. If there is a choice of foods, a friend or school employee will tell him what they are and perhaps hand him what he chooses. Depending on circumstances, he may appreciate help in carrying a loaded tray.

It is important that *all* staff share modern attitudes toward blindness. The cooks do not cut the blind youngster's meat. The custodians do not move everything out of his way.

The blind student's eating habits should be as neat and well-mannered as those of his classmates. If a particular boy or girl should lack actual eating skills, private instruction should be provided under the guidance of the resource person.

Materials

See "Books"; the "Materials" section in the "Introduction"; "Pictures"; specific subject headings; et cetera.

Map Work

The student with some useful sight will probably make maximum use of it in map work. By selecting large, clear maps, using magnifiers, and/or bringing the work quite close to the eyes, he may find that he can make profitable use of his sight even though he does not ordinarily read inkprint.

The young student who is forming his concepts of geography must have access to maps and globes he can use. If print ones are not appropriate, Braille ones may be obtained from the sources described under "Books" and in the Introduction; and an ordinary relief map or globe may be satisfactory. See also "Pictures."

The older student who has already acquired basic geographical concepts may not need to have a map for some types of work. Oral discussion may be sufficient.

Mathematics

Any mathematical expression can be transcribed into Braille by using the Nemeth Code, a code used for mathematical and scientific notation. A blind student who already knows Braille will almost certainly be familiar with Nemeth, although some older blind persons and some sighted transcribers are not proficient in it. Mathematics texts may also be transcribed into large type, of course. Some materials may be recorded, although for many types of assignments it is important to have the problems written down.

Use of the pocket abacus (available from the National Federation of the Blind) is desirable from the standpoint of speed. Although in some situations it is desirable that the student work out the complete problem on paper, often it is more efficient to work the problem quickly on the abacus and then write down only the answer. All four basic operations may be accomplished on the abacus (using whole numbers, decimals, or fractions), as well as finding square roots.

Most aspects of teaching mathematics are covered elsewhere in this booklet. See the "Materials" section in the "Introduction," and the headings "Assignments," "Books," "Note-Taking," "Mechanical and Technical Graphics," "Pictures," et cetera.

Mechanical and Technical Graphics

Generally the blind student enrolls in this type of course for a slightly different purpose than does the sighted student. He does not expect that in his future job he will produce good quality drawings with his own hand. Rather, he needs (1) to learn the concepts which are taught by the course, and (2) to know the standard appearance and form of each symbol, in order to use a reader (who may have no technical knowledge) to interpret or produce diagrams.

Raised-line drawings are very useful, and many methods may be used to produce them. These include raised-line kits purchased from such sources as the American Foundation for the Blind; rubber bands or string pinned or glued down; narrow charting tape which can be felt on the paper; et cetera. (See also "Pictures.") A Braille ruler may be used, or a regular plastic ruler which happens to have raised markings.

The student with some useful sight may use extra-dark marking pencils, 4B or 6B lead for automatic pencils, felt pens, or the chalkboard, instead of raised lines.

Frequently the diagram will be done to a larger scale than would be typical for the sighted.

Movies, Plays, and Assemblies

Usually the spoken portion of the presentation will convey enough information. In occasional situations such as silent movies, a congenial classmate may narrate quietly.

Do inform the blind student, if necessary, of the location of such things as the movie screen or the flag, so that he may face the right way.

Music

The blind boy or girl should expect to take all required music courses and to decide individually about electives. (Contrary to popular opinion, the blind as a group are not unusually musical.)

Frequently only the words of a song need to be brailled. In fact, often memorization will suffice and no brailling at all is necessary.

When the musical score is required (as for the serious study of an instrument), it can be brailled also. However, Braille music has a special code which is different from ordinary literary Braille. Instruction from a resource person will be required for the student who wishes to use music Braille and does not already know how to read it.

Note-Taking

By the intermediate grades, the student should be proficient in using the slate and stylus, which may be carried in the pocket or purse and used for the equivalent of taking notes with pencil and paper.

You will find that, to make explanations clear to the blind boy or girl, you will verbalize things which otherwise might have been presented or implied in visual form only. For example, you may say, "This worm is usually about four inches long," rather than, "It's about this long." You may speak a formula aloud as well as writing it on the board. This often has the pleasant result of making explanations clearer or more compelling to the sighted students as well as the blind. Do *not* feel, however, that you should overhaul your vocabulary and make sweeping changes in your manner of presentation. Slight changes such as the above will come naturally as time passes.

If important material appears on the chalkboard and is not discussed aloud, several alternatives exist. A reliable classmate may be supplied with carbon paper and asked to make a duplicate copy so that the blind student may go over it later with a reader. If the item is very short, a congenial classmate might read it aloud immediately. In certain situations (such as presenting vocabulary words to a fourth-grade reading class) the material might be brailled beforehand so that the blind student may follow his own copy along with the class.

As the student matures, he should take more and more responsibility for making his own arrangements and for asking appropriate questions if he does not understand.

Organization of Possessions

The disorganized blind student, like the disorganized sighted student, must be given strong guidance to improve. Does he have a separate folder or notebook section (labelled in

Braille) for each course he is taking? Has he an up-to-date list of assignments? Has he planned where to keep loose items such as his slate and stylus? Does he avoid putting off assignments until the last minute? Does he make optimum use of reader time? Questions such as these can prevent much wasted time.

Physical Education–*General Remarks*

It is possible to include a blind student meaningfully in any physical education activity. A few suggestions appear below and the ingenuity of teacher and students will provide many more ideas.

In many activities, such as swimming, no adaptations at all are necessary. In others, some adaptation of the rules may be desirable, as in the ideas for ball games below.

At the secondary level the student often may choose his physical education courses. Judicious choice can result in convenience for student and instructor. It is vital, however, that the choices be true equivalents in terms of physical activity, and that the blind student meet the same overall requirements as the sighted.

When the blind student is in a class where including him in a particular activity would have substantial disadvantages, it may be best to have him do some other type of exercise at that time. For example, rather than trying to take part in a fast-moving basketball game, he might practice weight lifting, rope jumping, et cetera. Again, however, it is vital that this be a true equivalent in terms of physical exercise. His physical development will not be aided if he merely keeps score.

See also "Extracurricular and Out-of-School Activities."

Examples of Ideas for Specific Activities

(Note.–These are only examples, not intended to be an exhaustive list.)

1.*Teaching a specific body motion* (as in calisthenics, swimming, dancing, et cetera):

Give clear verbal directions. Supplement as needed by taking hold of the student and showing him the position, and/or letting him examine someone else's posture. On occasion it may be desirable to teach him some of the motions before the class meets.

2. *Ball games and races:*

a. Pair the blind student with a partner for running. Alternatively, the runner may hold onto a large ring which slides along a rope.

b. Provide a sound at the goal or base. This may be a mechanical noisemaker or a person's voice. The student can then run without a partner.

c. The blind batter may use a batting tee, or may throw the ball straight up for himself and then bat it as it comes down.

d. A ball which contains a noisemaker may be used.

e. Consider modifying the rules slightly to give the blind player a fair chance. Example: He need not catch a fly ball to put a batter out, but need only touch it before it hits the ground.

f. Assign the blind player to a particularly appropriate position and allow him to stay there longer than usual. Examples include the volleyball server and the football center.

g. Provide tactual indications (or bright, clear markings for those with useful sight) for sidelines, tracks, et cetera, if it is helpful and convenient to do so. If the borderline between the grass and the blacktop coincides with the sideline in a game, the blind player will recognize it easily.

3. *Trampoline:*

The student "spotters" around the trampoline may call out directions if the blind student moves off center while jumping.

Some people like to pin or sew a small bell underneath the center of the canvas.

4. *Bowling:*

Make use of a bowling rail (available from the American Foundation for the Blind) or the side wall. The blind player lightly follows this guide with his free hand while walking forward. This is one of the very few situations where counting steps is usually desirable.

After his first ball, someone informs the player which pins are still standing.

Some people prefer to walk forward (using the guide rail, as above) all the way to the foul line, then walk backward an appropriate number of steps, and then go forward again to release the ball.

Pictures, Diagrams, and Displays

Often a visual presentation becomes an oral presentation in the process of discussion, and therefore there is no problem. Also, many times it does not really matter whether the blind student examines a display which is mainly for decoration or which reinforces a concept already taught.

When it is important that the student learn from a diagram or other display, many alternatives are available.

A sighted person may describe the item to the blind youngster.

Whenever possible and appropriate, the student should examine as much of the display as possible by touch.

If an important item cannot be examined by touch and is difficult to describe, a display may be prepared in tactile form. Raised-line drawing kits may be purchased from such sources as the American Foundation for the Blind. Ordinary materials may be used to advantage; excellent diagrams can be made by gluing down string or other materials, stretching rubber bands around pins, stitching on paper with needle and thread, et cetera. An ordinary tracing wheel, designed for use by the sighted in sewing, produces raised lines when heavy paper is placed on a soft surface. (Note, however, that the design appears on the reverse side of the paper.) The paper in a Braille "board slate" can be moved around in such a way that various kinds of lines may be made with the stylus. Many helpful aids, such as Braille graph paper, may be obtained from sources such as the American Printing House for the Blind.

Excellent three-dimensional models are often already available in the school media center, especially in the fields of science and mathematics.

A direct experience generally is even more meaningful than a model or description. If the biology class is studying birds, for example, perhaps several stuffed or live ones can be obtained.

We caution you, however, against devoting too much time to arranging special materials or special field trips. Consider the relative importance of the concepts, the present level of understanding of the student, and the time available. Remember that no aid or exhibit, however excellent, is a substitute for all-around good teaching.

See also "Mechanical and Technical Graphics," and "Movies."

Psychological Testing

If intelligence tests are given to all students, several alternatives exist for the blind youngster.

Often the older student will already have been tested. Also, much can be inferred from observation of his general performance. If, however, an intelligence test is desired, one alternative which your school psychologist might choose is to give the verbal portion of an individual test, and another alternative is to use a test especially adapted for the blind. Even if a particular score is not fully valid in the technical sense, it can be useful for placement and guidance.

If a student with a substantial loss of sight attempts to take the regular test by using his remaining vision, he is placed at an unfair disadvantage in regard to speed and accuracy.

Tests of emotional balance or psychological adjustment should be given only on the same basis as for other students. Blindness in itself does not cause emotional disturbance.

Reader Service

See "Books."

Reading Devices

Some older students may be interested in such machines as the Optacon, Visotoner, Stereotoner, and various other video viewers. These, however, are *additional* tools which are very useful in certain circumstances, rather than primary reading methods or replacements for Braille. Disadvantages such as slow speed must be considered along with advantages.

Scheduling Courses

The blind student should follow the same curriculum requirements as anyone else, both in regard to hours of credit per semester and in regard to the requirements of each particular course. The only class which has a real reason for excluding blind students is driver education (and even in this case an interested blind student may wish to audit the class for the theory portion). In all other subjects a way can be found to include the blind student for full credit. Although he may use different methods, he can and should acquire the same information and skills as anyone else.

Science

The blind student will examine things tactually, and should listen carefully to descriptions of visually-oriented materials. If a demonstration is given, he may need an oral description.

When part of an activity is impossible for the blind student (such as reading a print dial), he can take care of another facet (such as making computations), and thus do his fair share. Since laboratory work is usually done with a partner anyway, this presents no particular problem.

Occasionally a modification will need to be made in assignments such as using a microscope. Such modifications should be the exception rather than the rule, however; and when really necessary, the modification should provide a logical *equivalent*, rather than a substitute which is easier and/or irrelevant. In the case of microscope slides, for example, the blind student should be able to operate the microscope for someone else to look into, make a verbal description of the typical appearance of each item studied, and learn all the concepts which the others learn.

The advanced student who is seriously planning a scientific career may wish to purchase various types of equipment especially designed for the blind.

See also "Assignments," "Pictures," "Mathematics," et cetera.

Seating in the Classroom

The blind student will often need more than average space, to accommodate Braille books and other equipment. You may need to allow him access to a bookshelf or an extra desk.

Since he relies on his hearing, it is important that he sit where he can hear well. (This does not necessarily mean the front row, however.)

Use of the typewriter, brailler, recordings, and live readers can produce noise, and the student should be considerate toward others. Headphones render a recording silent so far as others are concerned. Use of the slate and stylus (which produce very little noise) is to be preferred to the use of the Perkins Brailler in the classroom. If a typewriter or a reader is disturbing to others, the work can be done in a far corner of the room or even outside the classroom. (If this is necessary, however, care must be taken to see that the student rejoins the group promptly when the activity is over.) Actually, noise almost always proves to be much less of a problem than might be anticipated, since the class quickly becomes accustomed to the blind student's methods.

It should *not* be necessary that the student always sit next to the door or in a location especially easy to reach. The older student should be able to take responsibility for selecting an appropriate seat.

Social Skills

The development of social skills (such as personal grooming, etiquette, and making friends) is the same for the blind as for the sighted. The blind person will use different *methods* on occasion (such as making more use of the sense of touch in applying makeup); but the young blind person needs to learn the same things as the young sighted person.

It is unfortunately true, however, that the blind person is sometimes behind in social skills—due not to inability to learn, but due to the belief that he cannot learn, or to mistaken sheltering from social experience. The resource person can help if a specific technique is lacking; and in general the blind youngster who is behind in social skills will be helped by the same approach as any other youngster with a similar problem.

You may be wondering how the sighted students will accept a blind classmate. Generally, when their natural curiosity has been satisfied, youngsters respect the blind student's methods and accept them as a matter of course. If anything, young people tend to accept a disability more easily than do adults. We suggest that you speak openly and truthfully about the disability (without dwelling on it unduly), and encourage the student himself to do the same.

If problems of acceptance do arise, the following ideas may be helpful:

1. Help the blind student to improve his own social skills and general self-confidence, and to contribute to the group in worthwhile ways.

2. Help him to determine when he does and does not need help, and to accept or refuse help pleasantly. Insist that he never "use" his disability to escape work or responsibility.

3. See that he learns skills and techniques which will diminish his need to accept help.

4. Remind youngsters that we are all different, and that it is rude to overemphasize *any* characteristic (such as freckles, height, et cetera).

5. Explain the physical cause of the disability in appropriate terms, and help the student to do so also.

6. Emphasize that the disability is a physical limitation and nothing more, and that it does not affect anything but the eyes.

7. Encourage other students' interest in such aids as Braille, and point out their value. A few students may be seriously interested in learning Braille.

It usually is not difficult to recognize overt rejection. It may be much more difficult to recognize the opposite extreme—*too much* help and protection on the part of peers—but this is just as undesirable. Margaret Hall remarks pointedly that "The child should be considered a classmate, not a class project."[1]

Bearing in mind that no student can expect to be everyone's close friend, the wise counselor or teacher can help each student achieve normal relationships with his or her classmates.

Awkward Motions or Mannerisms.—Sometimes a blind person develops an awkward motion, such as stirring batter with the spoon in an unusual position. Show him tactfully how to perform the conventional motion. (Take the student's hand and move it in the desired manner, or let him examine someone else's hand performing the action.)

Similar guidance should be given if a student develops socially unacceptable behavior such as carrying on a conversation without facing the other person.

> To allow the . . . child to continue such socially unacceptable behavior because "the poor little dear can't see and doesn't know any better," is doing the child a grave injustice. He is going to live in society and he must learn to abide by its rules if he is going to be an accepted member.[2]

If a blind student happens to have an unwanted mannerism such as head nodding or finger tapping, we suggest that this be handled in the same way as with other students. (Every school has some students who bite their nails, twist their hair, or whatever.) Blindness itself does not cause such habits, but sometimes they are caused by the way the disability has been handled. An active, eager boy, for example, may be severely restricted by parents who think physical activity is dangerous for the blind; and with inadequate outlets for his energy the boy may develop nervous mannerisms. Thus, the best way to prevent or alleviate this type of problem is to help the youngster to lead a normal, active life with good physical and mental health. To get rid of an established unwanted habit, a trusted adult can often develop a confidential system of reminders.

Tests

Possible alternatives include:

1. Have the test transcribed into Braille or large print.

2. Allow the student to use a reader (or a tape recorded copy of the test) and work in another room. He may respond by dictating answers or typing them.

3. The classroom teacher may wish to test the blind student individually and orally. (It is very important that he be given the same test the others take.)

4. With an inexperienced student, the resource person might administer the test.

For certain timed tests, the time limit may not be fair for a blind student, due to the use of alternative techniques. In this case we suggest that you allow him to take more time without penalty if necessary, but that you also observe his score at the standard time limit so that he may work toward success within the regular time.

For suggestions regarding intelligence tests, see the section on "Psychological Testing."

Travel (Mobility)

By the intermediate grades, the student should be sufficiently skilled with the long white cane to be able to travel alone in the school building (even if it is large and complex), and to travel independently on the street in at least some areas. If he has not had such training, every effort should be made to obtain it for him. (See the "Introduction" for suggestions on finding resource help.)

The student who has already learned basic travel techniques will still need at least occasional lessons to maintain and improve his skills. Also, whenever he begins a new class schedule he will need to learn the new routes. If possible, someone may show him around before classes start. Another approach is for the blind youngster to be accompanied from class to class the first few times. After this initial help, he should be able to pass between

classes on the same basis as others, without extra help or extra time. In very crowded hallways the cane may be pulled up shorter so that he can find his own way without tripping others.

At times it will be advisable for the blind person to walk with someone else. He should take the arm of the sighted person (a gentle grip just above the elbow) rather than vice versa.

Do *not* allow the student to convince himself that he has memorized the school building or grounds so well that he need not use his cane. Without the use of a cane, either the blind youngster continually risks a bump or a fall, or else other people must watch him and keep everything out of his way. With a cane properly used, such things as open locker doors, stairways, mop buckets, and holes in the sidewalk are not hazards. Except in his own home, the student should use his cane whenever he walks around, with the only exception being special activities such as swimming.

Typing

See "Assignments."

Vocational Guidance

Guidance as to which of the hundreds of occupational choices is best for a given individual student is the same for the blind as for the sighted.

Not long ago, very few occupations were open to blind persons. Enormous advances have been made in the past few years, so that now very few occupations are closed. If a student is seriously wondering whether a given occupation is now possible, and his teachers and counselors are not sure that it is, we suggest writing to the National Federation of the Blind for information.

The college-bound student will be interested in the pamphlet *Handbook for Blind College Students* also available from the National Federation of the Blind. He will also wish to learn what services–financial and otherwise–will be available to him from the state rehabilitation agency. Choosing a college or university should be on the same basis as for everyone else. Although some states have one particular university which offers special services to the disabled, a student should go there only if it really does meet his particular needs and interests. The blind student with a proper background can make arrangements to solve his own problems, and does not need special services from the college.

Summer and part-time jobs should be open to the blind student on the same basis as for others. The school counselors and classroom teachers, as well as the resource person, can often be extremely helpful by persuading a businessman to give a blind boy or girl a fair chance.

III. SUPPLEMENTARY SUGGESTIONS FOR THE YOUNGER CHILD

These suggestions are designed to supplement, rather than replace, the remarks in the remainder of the booklet. Although most of the suggestions in this booklet are oriented toward older boys and girls, the principles are essentially the same in working with the small child. The paragraphs on "Art," for example (page 8), apply well to the very young child, except that the teacher will select only media which are appropriate for the very young.

Preschool

The normal blind child can and should get along satisfactorily in a regular preschool. Although special preschools do exist and are helpful for some children, in most cases it is best for the child to attend the same preschool he would attend if he were sighted.

Since preschoolers are not usually expected to learn to read and write, resource help is not as necessary as it is in the primary grades. If a resource person is available to advise the teachers, provide beginning mobility instruction, and provide materials, it is very helpful; however it is quite possible to work out a satisfactory experience for the child without a specially trained teacher.

Many of the remarks given below are applicable to preschool children as well.

Kindergarten and the Primary Grades

With adequate resource help, the blind child can succeed in kindergarten and the primary grades in a regular elementary school. The kindergartner will generally need less resource help than the child who is actually learning to read. However, as the child begins formal reading readiness, it becomes more and more important that he receive adequate attention from someone who is trained to teach Braille to children. If the child will be commuting to a resource center or attending a residential school in first grade, it may be best for him to go there for kindergarten also.

When the child begins actual reading instruction, he should have daily attention from someone who knows how to teach Braille reading and writing to children. During his first few years of school the child will also need to learn other important skills, such as walking independently with the long white cane, and the general methods used by a blind person whether in school or out.

In the regular public or parochial school, this generally means that a resource teacher will take part of the responsibility for the child's education during the very first years of formal education. The resource teacher working with a child of this age will help in the same ways given on pages 3 and 4 of this booklet; however, he will probably give much more help than would be suitable for an older student, and he may do quite a bit of direct teaching. For example, the resource teacher may give the child all of his reading lessons during the first few months of first grade, and then gradually integrate the child into a regular

classroom reading group. Alternatively, he might assist the child in his regular classroom during reading lessons for the first few months, and then gradually withdraw this support.

Both reading readiness and actual reading instruction should proceed at the same pace as for a sighted child of equal mental ability.

The need for individual instruction is *not* an indication that education or life is extremely difficult for the blind, nor is it an indication that young blind children never succeed in regular school settings. Rather, the need for resource help exists because the classroom teacher does not have the time or the knowledge to teach specific blind techniques and methods. As the child moves along in school, he needs less and less individual help, as he becomes able to follow the regular class presentations while using his own individual methods and techniques. Moreover, even the beginning first grader should be able to work with his regular class for many lessons without needing the direct assistance of the resource teacher.

Pages 2-5 of this booklet suggest several ways to obtain resource help. If adequate help cannot be provided in the local school for the young beginner, it may be necessary for him to attend a resource center or a residential school elsewhere for the first few years. By the time he reaches the intermediate grades or the junior high school, depending on his maturity and progress, he should be able to transfer to his local school and make a satisfactory adjustment without daily attention from a resource person.

The younger child will generally need more direct experiences and concrete aids than will the older student, since the younger child will still be developing many concepts. If the first grade is studying animals, for example, the sighted children will be shown pictures to be sure they identify the animals correctly. It is helpful for the young blind child to examine toy or model animals which are large enough to be meaningful, and to examine real animals on occasion. Parents may be able to arrange trips to a farm or a children's zoo.

Similarly, the beginner in arithmetic will benefit from counting concrete objects, using a Braille clock face when learning to tell time, et cetera. During reading lessons, the young beginner will enjoy the occasional chance to examine an actual object or act out an activity featured in the story.

As discussed under "Pictures," however, it is *not* desirable to carry this to extremes and devote exaggerated attention to providing concrete materials and experiences. The resource teacher will help in judging whether concrete aids are important in various instances, and in providing them if they are. The resource teacher will also help if the child harbors important misconceptions which the classroom teacher does not have time to correct.

The young blind child may need to be told about social conventions that other children have learned through sight. For example, he may not turn appropriately to face the person with whom he is conversing. If the child has not learned about this at home, then the school

should teach him. Other examples include facing the flag or movie screen, appropriate posture for sitting and standing, taking one's place in line, et cetera. With practice a blind person can observe all such conventions, by using alternative techniques and occasionally asking questions.

In working with the blind first-grader who has some useful vision, it may be difficult to decide whether he should learn Braille or inkprint reading (or some of both). The resource teacher will generally take the major responsibility for this decision; however, the classroom teacher can provide valuable information which bears on the decision, and can also help keep Braille from being regarded as an inferior "last resort." In making the decision, all relevant factors should be considered carefully: visual acuity (especially at reading distance), visual field, fatigue, adaptability in focusing, the probable future condition of the student's eyes, and any special problems or circumstances. Bear in mind that generally the child will be more likely to lose than to gain vision in the future, and that a person who learns Braille at a very early age has a better opportunity to develop excellent speed and proficiency. If a child has real difficulty in seeing the relatively large print which is normally used in the first grade, it is very unlikely that inkprint will be an efficient mode for him. (See also page 11.) It is sometimes desirable for a person to develop some skill in both Braille and inkprint. One clearly should be his primary mode, however, to prevent confusion and inefficiency.

Until he learns to type, the young student will write his assignments in Braille. In order that the classroom teacher may evaluate the child's work, the resource teacher may transcribe it into print. Alternatively, the resource teacher may evaluate the lesson himself, or the child may read his answers aloud to his classroom teacher.

A blind person should be familiar in a general way with the shape of printed and cursive letters, and learn to write his own signature. Teaching this is generally the responsibility of the resource teacher.

The resource teacher may write the inkprint words above the Braille words in the child's textbooks, as necessary, to enable the classroom teacher to direct the child's reading.

Some things which would probably not be transcribed into Braille for the older student, such as short worksheets or chalkboard exercises, may be transcribed for the younger student because they are an important part of his learning to read. When a particular exercise has not been transcribed, the teacher or another child may read it aloud. If the exercise involves choosing between individual words, it may be desirable to spell the choices aloud. The resource teacher will suggest additional ways to adapt various kinds of exercises.

In some situations it is desirable to assign a "buddy" to assist the blind child or give him information. For example, if a clock face is shown to a group of children who are learning to tell time, a classmate might quietly tell the blind child where each hand is located. Care should be taken, however, not to allow such a relationship to become burdensome to either child.

Since the attention span of the young child is short, and since the blind child will sometimes be learning a skill or a symbol which his classmates are not learning, there may be times when he will not complete every assignment which the others do. If such an adjustment is necessary, however, it should be regarded as temporary. As the youngster grows older, he should come to regard as his own responsibility any inconveniences or delay due to the use of alternative techniques, and he should expect to take work home if necessary, so that he will not need shortened assignments. (See also pages 8-9.) If a child is not required to complete certain assignments, care must be taken to see that he does enough to grasp the skills and concepts involved. Whenever possible, also, the child should practice both the blind technique and the classroom assignment at the same time. For example, if he needs practice in writing with the Braille slate and stylus, he could practice with his regular spelling list for the week.

The young blind child can and should participate normally in recess and playground activities. Many applicable suggestions appear under "Physical Education." A new student should probably have a partner show him around for the first few recesses, but after that he should be able to choose activities on the same basis as the other children. If he is hesitant, someone might make suggestions to him from time to time. Most playground equipment needs no adaptations once the child is familiar with it. Even if a particular activity appears impossible or dangerous, consultation will usually bring about a plan for the blind student's participation.

Since all young children need adult supervision to insure their safety, the same is true for the blind child. The blind child does not necessarily need more protection than the others, however; this is an individual matter. The normal blind child can learn to be suitably careful of hazards such as swings and seesaws, by learning their location and/or listening appropriately. In learning a new activity such as carving with a sharp knife, the blind boy or girl should observe the same cautions as anyone else; and the resource teacher may help with the actual teaching of the skill, if desired.

As discussed on pages 25-26, it is very important that the blind student learn adequate travel (mobility) techniques. Although the classroom teacher is not expected to teach cane travel as such, his or her role is very important in the development of the child's ability to move about and find things independently. The classroom teacher should determine approximately how much independence can be expected of a given child (the resource teacher can help in the evaluation), and then require that the child maintain and improve that independence. The classroom teacher should show the blind child where things are, by taking his hand if necessary, and help him learn to find things by himself. (Other children can help also.) It is also considerate to tell a blind person when the location of familiar objects is changed.

The newest and youngest students will not have learned cane travel, and will therefore need assistance outside of very familiar areas. It is best if the blind person takes the arm of the sighted person, rather than vice versa; ideally this is a gentle grip just above the elbow, but a small child may take the hand of a tall adult.

Although kindergartners and even preschoolers can begin to learn cane travel, it may take some time before a given child can use the cane reliably when his travel teacher is not with him. If he cannot yet use a cane satisfactorily, he should be able to walk alone in his classroom and perhaps to one or two other nearby rooms, but should have assistance to go farther. After he does learn to use his cane reliably and independently, the travel teacher will suggest a gradual increase in the area within which the child is allowed to walk by himself. At this time, teachers should begin to insist that he use his cane at all times unless he is seated, working within a very small area, or participating in a special activity such as a ball game.

Since the blind child is only a child, problems of misuse of equipment can crop up. We suggest that these be handled in the same ways as misuse of any other tool. If the youngster deliberately hits or trips others with his cane, for example, the same kinds of consequences are appropriate as for the child who hits or pokes with a pencil. (Note: If it should become necessary to take the cane away temporarily for disciplinary reasons, consider the possibility that a child who does not yet appreciate the value of his cane may actually *wish* to have it taken away. If valued privileges are conditioned upon the proper use of the cane, this problem can be minimized.) The blind child who ventures into an area which is forbidden or unsafe for his level of travel ability should be treated like any child who is found in a forbidden area.

Parent conferences are extremely helpful, both to appraise the child's progress and to discuss blindness as such. Although the resource teacher may participate in conferences, only the classroom teacher is really able to have an objective description of the child's progress in comparison with that of other children. If a child is not yet performing up to his apparent intellectual potential, parents and teachers can plan together how to help the child learn and mature.

IV. CONCLUSION

There is no formula to guarantee that any person will succeed in school or in life. You will certainly think of many other ideas and alternatives that could well have been included in this booklet, and we welcome your suggestions regarding future additions. We hope that this discussion based on the successful experiences of others will be helpful as you use your own ingenuity and ideas in helping a particular blind student to work toward his own success.

FOOTNOTES

[1] Margaret M. Hall. "The Blind Child in Kindergarten." *The New Outlook for the Blind* (January, 1961), p. 13.

[2] Hazel Turner. *The Role of the Resource Teacher at the Secondary Level.* Unpublished dissertation, San Francisco State College, 1967, p. 65.

REFERENCES

Bibliography

American Printing House for the Blind. *The Central Catalog: Instructional Materials Reference Center for Visually Handicapped Children* (fifth edition). Louisville, Kentucky: American Printing House for the Blind, 1973.

Davidow, Mae E. *The Abacus Made Easy.* Philadelphia, Pennsylvania: Overbrook School for the Blind, 1966.

Evans, Marian H., and Ernest R. Camfield. *So We Might See Alike.* Temple City, California: a booklet produced by Temple City High School.

Grannis, Florence. "Beginning a Transcribing Group." *The Braille Monitor,* June, 1970, pp. 684-703.

Hall, Margaret M. "The Blind Child in Kindergarten." *The New Outlook for the Blind,* 55:1, January, 1961, pp. 11-16.

Iowa Commission for the Blind. *Belief* (Annual Report of the Commission for the Blind). Des Moines, Iowa: State of Iowa, 1973.

Nading, Mabel, and Ramona Walhof. *Beginning Braille for Adults.* Des Moines, Iowa: National Federation of the Blind, 1974. (Note: This book is suitable for newly blinded adolescents as well as adults.)

National Federation of the Blind, 218 Randolph Hotel, Des Moines, Iowa 50309.

National Federation of the Blind. *The Braille Monitor.* Berkeley, California.

(Note.–This is the monthly magazine of the National Federation of the Blind, and carries articles of current interest regarding blindness. It is published in Braille, talking book, and inkprint, and is available to all interested persons.)

Rottman, Robert. *An Open Letter to the Parents of Blind Children.* Berkeley, California: National Federation of the Blind.

Rottman, Robert. *Some Thoughts on the Education of Blind Children.* Berkeley, California: National Federation of the Blind.

Saunders, Judy, Ed. *Handbook for Blind College Students.* Berkeley, California: National Federation of the Blind, Student Division, 1970.

Turner, Hazel. *The Role of the Resource Teacher at the Secondary Level.* Unpublished dissertation, San Francisco State College, 1967.

United States Library of Congress, Division for the Blind and Physically Handicapped. *Volunteers Who Produce Books: Braille, Large Type, Tape.* Washington, D.C.: Library of Congress, 1970.

Walhof, Ramona. "The Blind Can Sew–Some How-To Ideas." *The Braille Monitor,* June, 1973, pp. 306-7.

Willoughby, Doris. "Blind Children Type by Touch." *The Balance Sheet,* LI:5, January, 1970, pp. 213-215.

Schroeder, Ruth, and Doris Willoughby. *Suggestions for the Blind Cook.* Des Moines, Iowa: National Federation of the Blind.

Addresses

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206

American Foundation for the Blind, Inc.
15 West 16th Street
New York, New York 10011

The Braille Monitor
2652 Shasta Road
Berkeley, California 94708

Division for the Blind and Physically Handicapped
Library of Congress
1291 Taylor Street NW
Washington, D.C. 20542

The Hadley School for the Blind
700 Elm Street
Winnetka, Illinois 60093

National Federation of the Blind
218 Randolph Hotel Building
Des Moines, Iowa 50309

Royal National Institute for the Blind
224-6-8 Great Portland Street
London, W1N 6AA England